

IN THE CLAIMS

This listing of the claim will replace all prior versions and listings of claim in the present application.

Listing of Claims

1. (currently amended) A video distribution system connected to a communication network for distributing an image in response to a request, comprising:

at least one image pickup unit for picking up an image of a predetermined monitor area and converting said image into a video signal;

at least one encoder connected to receive the video signal from said image pickup unit, each encoder encoding the video signal from an associated image pickup unit and sending ~~said the~~ encoded video signal to said network;

an image accumulation and distribution unit connected to said network for accumulating the encoded video signal from a designated encoder, said image accumulation and distribution unit attaching unique information to each image frame;

a data converter connected to said network for reading the accumulated image from said image accumulation and distribution unit and converting said image into a reduced image in response to a request;

at least one information terminal connected by wire or radio to said network for acquiring and displaying an image by accessing said image accumulation and distribution unit or said data converter; and

a notification unit connected to said network for reading the accumulated image from said image accumulation and distribution unit, detecting an image

change indicating an abnormality in said predetermined monitor area and displaying ~~the~~ alarm information containing ~~the~~ a change occurrence time on an associated information terminal,

wherein said associated information terminal accesses said image accumulation and distribution unit or said data converter in response to an operation of said associated information terminal by ~~the~~ a user and acquires the image in a predetermined time range related to said change occurrence time from said image accumulation and distribution unit or said data converter.

2. (currently amended) A video distribution system according to Claim 1, wherein said associated information terminal displays in ~~the~~ a display section thereof said alarm information including at least said image change occurrence time, ~~the~~ said image as of said change occurrence time and a symbol allowing the user of said associated information terminal ~~user~~ to select whether ~~the~~ said image in said predetermined time range continues to be reproduced or not.

3. (currently amended) A video distribution system according to Claim 2, wherein said associated information terminal displays in ~~the~~ a display section thereof ~~the~~ said image in said predetermined time range together with a symbol indicating ~~the~~ a present reproduction condition in response to ~~said~~ selection of ~~the~~ continued reproduction by said user.

4. (currently amended)A video distribution system according to Claim 1, wherein said associated information terminal acquires ~~the said~~ image in said predetermined time range from said data converter and displays said image in dynamic image mode in the display section of said associated information terminal.

5. (currently amended)A video distribution system according to Claim 1, wherein said associated information terminal acquires the image in said predetermined time range from said data converter and displays said image, frame by frame, in the display section of said information terminal in response to ~~the a~~ request of the user of said associated information terminal-user.

6. (currently amended)A video distribution system according to Claim 1, wherein said at least one information terminal includes at least one portable terminal and at least one client ~~PC~~-(personal computer) (PC).

7. (currently amended)A video distribution system according to Claim 2, wherein said display section of said associated information terminal includes a field in which said user is caused to input at least ~~the~~ information for specifying said associated information terminal user and ~~the an~~ address of said notification unit in response to ~~said~~-selection of ~~the~~-continued reproduction by said user.

8. (currently amended)A video distribution system according to Claim 7, wherein said notification unit stores said unique information in a list in association

with ~~the~~a serial number of a corresponding image frame each time of detection of ~~said~~ image change, and

wherein said list is displayed in said display section of said associated information terminal in such a way as to permit selection of arbitrary unique information, in response to the input of said user, specifying information and ~~the~~ address of said notification unit.

9. (currently amended) A video distribution system connected to a communication network for distributing an image in response to a request, comprising:

at least one image pickup unit for picking up an image of a predetermined area and converting said image into a video signal;

at least one encoder connected to receive ~~the~~a video signal from said image pickup unit, each encoder encoding the video signal from an ~~asseeiad~~associated image pickup unit and sending ~~said~~the encoded video signal to said network;

an image accumulation and distribution unit connected to said network for accumulating the encoded video signal from a designated encoder, said image accumulation and distribution unit attaching unique information to each image frame;

a data converter connected to said network for reading the accumulated image from said image accumulation and distribution unit and converting said image into a reduced image in response to a request;

at least one information terminal connected by wire or radio to said network for acquiring and displaying an image by accessing said image accumulation and distribution unit or said data converter;

a sensor arranged in each ~~said monitor area~~ of a plurality of monitor areas for detecting an abnormality in said monitor area; and

a notification unit connected to said network for reading the accumulated image from said image accumulation and distribution unit, receiving ~~the~~ an output of said sensor indicating an abnormality in said monitor area and displaying ~~the~~ alarm information containing ~~the~~ a change occurrence time on associated information terminal;

wherein said associated information terminal accesses said image accumulation and distribution unit or said data converter in response to ~~the~~ an user operation of said associated information terminal and acquires the image in a predetermined time range related to said change occurrence time from said image accumulation and distribution unit or said data converter.

10. (currently amended) A video distribution system according to Claim 9, wherein said associated information terminal displays in ~~the~~ a display section thereof said alarm information including at least said image change occurrence time, the image as of said change occurrence time and a symbol allowing said associated user of said information terminal to select whether the image in said predetermined time range continues to be reproduced or not.

11. (currently amended)A video distribution system according to Claim 10, wherein said associated information terminal displays in ~~a~~the display section thereof the image in said predetermined time range, together with a symbol indicating ~~the~~a present reproduction condition, in response to ~~said~~ selection of ~~the~~ continued reproduction by said user.

12. (currently amended)A video distribution system according to Claim 9, wherein said associated information terminal acquires the image in said predetermined time range from said data converter and displays said image in dynamic image mode in ~~the~~a display section of said associated information terminal.

13. (currently amended)A video distribution system according to Claim 9, wherein said associated information terminal acquires the image in said predetermined time range from said data converter and displays said image, frame by frame, in ~~the~~a display section of said associated information terminal in response to the request of said user of said associated information terminal~~user~~.

14. (currently amended)A video distribution system according to Claim 9, wherein said at least one information terminal includes at least one portable terminal and at least one client ~~PC~~(personal computer)(PC).

15. (currently amended)A video distribution system according to Claim 10, wherein ~~said~~the display section of said associated information terminal includes a

field in which said user is caused to input at least ~~the~~ information for specifying said associated information terminal user and ~~the~~ an address of said notification unit is displayed in response to ~~said~~ selection of ~~the~~ continued reproduction by said user.

16. (currently amended) A video distribution system according to Claim 15, wherein said notification unit stores said unique information and ~~the~~ a serial number of a corresponding image frame in a list at each time of detection of ~~said~~ image change, and

wherein said list is displayed in said display section of said associated information terminal in such a way to permit selection of an arbitrary detection time or an arbitrary channel number in response to ~~the~~ input of said user specifying information and ~~the~~ address of said notification unit.

17. (currently amended) A video distribution method for a video distribution system connected to a communication network for distributing an image in response to a request, comprising the steps of:

accumulating ~~the~~ a video signal ~~in~~ of at least one monitor area in an image accumulation and distribution unit through said network, wherein said video signal has attached thereto information unique to each image frame;

reading an image for each ~~said~~ of a plurality of channel channels from said image accumulation and distribution unit through said network;

detecting ~~the~~ an image change indicating an abnormality in an associated monitor area from said image read out, producing ~~the~~ alarm information containing

~~the a~~ change occurrence time and a still image of said change occurrence time, and transmitting said alarm information to an associated information terminal through said network;

displaying said alarm information on said associated information terminal;

acquiring ~~the said~~ image in a predetermined time range related to said change occurrence time from said image accumulation and distribution unit or ~~said a~~ data converter in response to ~~the~~ selection of ~~the said~~ image reproduction by ~~the a~~ user of said associated information terminal; and

displaying said image in said predetermined time range in ~~the a~~ display unit of said associated information terminal.

18. (currently amended) A video distribution method for a video distribution system connected to a communication network for distributing an image in response to a request, comprising the steps of:

accumulating ~~the a~~ video signal ~~in of~~ at least one monitor area in an image accumulation and distribution unit through said network, wherein said video signal has attached thereto a channel number and a serial number constituting an Identification (ID) number unique to ~~the an~~ imaging date and time and ~~the an~~ image pickup unit that has picked up each frame of ~~the said~~ image;

reading ~~an said~~ image for each ~~said of a plurality of channel channels~~ from said image accumulation and distribution unit through said network;

detecting ~~the an~~ image change indicating an abnormality in an associated monitor area from said image read out, and producing ~~the~~ alarm information

containing ~~the~~ a change occurrence time and a still image as of said change occurrence time;

transmitting said alarm information to an associated information terminal through said network and accumulating at least said change occurrence time and ~~the~~ a channel number related to said change occurrence time as a number corresponding to said ID number as a first list in a notification unit;

displaying said alarm information on said associated information terminal;

starting a video replay application or program by the user of said associated information terminal and acquiring said first list from said notification unit;

generating a second list of ~~the~~ an alarm generation time from said ~~acquired~~ first list and displaying said second list on said information terminal;

acquiring a reduced version of ~~the~~ said image in a predetermined time range related to said ~~selected~~ change occurrence time from a data converter in response to ~~the~~ selection of ~~the~~ a desired alarm generation time by ~~said~~ the user; and

displaying said ~~acquired~~ reduced image in the display section of said information terminal.

19. (new) An information terminal for use in a video distribution system which includes an image pickup unit, an image accumulation unit and a notification unit, said information terminal comprising:

a display for displaying an image picked up by said image pickup unit; and
at least one decision button,

wherein said information terminal displays an image change indicating an abnormality detected by said notification unit based on image data accumulated in said image accumulation unit from said image pickup unit, accesses image data accumulated in said image accumulation unit in response to an operation of said at least one decision button by an user and acquires image data of a predetermined time range from said image accumulation unit based on a change occurrence time related to said image change detected by said notification unit.

20. (new) An information terminal according to claim 19, wherein said information terminal displays in a display section thereof alarm information including at least said change occurrence time, an image as of said change occurrence time and a symbol allowing the user to select whether said image in said predetermined time range continues to be reproduced or not.

21. (new) An information terminal according to Claim 20, wherein said information terminal displays in the display section thereof said image in said predetermined time range together with a symbol indicating a present reproduction condition in response to selection of continued reproduction by said user.

22. (new) An information terminal according to Claim 19, wherein said information terminal acquires said image in said predetermined time range from a data converter which reads the accumulated image from said accumulation unit and

converts said image into a reduced image in response to a request and displays said image in dynamic image mode in a display section of said information terminal.

23. (new) An information terminal according to Claim 19, wherein said information terminal acquires the image in said predetermined time range from a data converter which reads the accumulated image from said accumulation unit and converts said image into a reduced image in response to a request and displays said image, frame by frame, in a display section of said information terminal in response to a request of the user of said associated information terminal.

24. (new) An information terminal according to Claim 19, wherein said information terminal is one of a portable terminal and a client personal computer (PC).

25. (new) An information terminal according to Claim 20, wherein said display section of said information terminal includes a field in which said user is caused to input at least information for specifying said user of said information terminal and an address of said notification unit in response to selection of continued reproduction by said user.

26. (new) An information terminal according to Claim 25, wherein said notification unit stores unique information in a list in association with a serial number of a corresponding image frame each time of detection of image change, and

wherein said list is displayed in said display section of said information terminal in such a way as to permit selection of arbitrary unique information, in response to the input of said user, specifying information and address of said notification unit.